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| APPLICATION NO.                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|-------------|----------------------|---------------------|------------------|
| 10/614,050                       | 07/08/2003  | Kang Soo Seo         | 1740-000010/US      | 7555             |
| 30593                            | 7590        | 11/28/2007           | EXAMINER            |                  |
| HARNESS, DICKEY & PIERCE, P.L.C. |             |                      | ZHAO, DAQUAN        |                  |
| P.O. BOX 8910                    |             |                      | ART UNIT            | PAPER NUMBER     |
| RESTON, VA 20195                 |             |                      | 2621                |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                 |              |
|------------------------------|-----------------|--------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |
|                              | 10/614,050      | SEO ET AL.   |
|                              | Examiner        | Art Unit     |
|                              | Daquan Zhao     | 2621         |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 September 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-14 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed 9/24/2007 have been fully considered but they are not persuasive.
2. Applicant's representative argues, in pages 8-10 of the remark, okada et al fail to teach a management area storing management information for managing reproduction of the stream, the management information including an information file associated with each clip file providing a map for the associated clip file, each map mapping presentation time information to address information for the associated clip file.
3. Okada et al teach a management area storing management information for managing reproduction of the stream, the management information including an information file associated with each clip file providing a map for the associated clip file, each map mapping presentation time information to address information for the associated clip file (e.g. column 80, lines 51-67 and figure 12A, time map table).
4. Applicant also disagree with the Examiner's Official Notice of a recording area of 2048 bytes. Murase et al (US 6,285,826 B1) teach in column 3, lines 64-65 that a recording area of 2048 bytes.
5. Applicant's representative argues, in pages 7-8 of the remark, claims 1,3,8, and 10 are statutory subject matter.
6. MPEP §2106.01(I) further states, regarding *functional* descriptive material, that "a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software

and hardware components which permit the data structure's functionality to be realized, and is thus statutory." Claims 1, 3, 8 and 10 do not present any computer and hardware components which permit the data structure's functionality to be realized. Therefore, claims 1,3, 8, and 10 are not statutory subject matter.

7. **Claim Status:** claims 13,14 are new.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-10 are rejected under 35 U.S.C. 101 because When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on

words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 1, 3, 8, 10 recite "a recording medium having a data structure". The "data structure" recites in the claims does not meet the definition of IEEE, wherein the definition of data structure is a physical or logical relation among data elements, designed to support specific data manipulation functions. The body of the claims 1, 3, 8, 10 only direct to a plurality of data packets and a plurality of time control information, which fail to show any physical or logical relationship. The data structure in claims 1, 3, 8 and 10 are treated as non-functional descriptive material recited in a recording medium, which is not statutory subject matter.

Claims 2, 4-7, 9 are also affected.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 3, 4, 6, 7, 8, 10, 11, 12, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al (US 6,181,870 B1).

For claim 1, Okada et al teach a computer-readable medium having a data structure for managing video data recorded on the computer-readable medium (e.g. figure 6A shows the data structure of video stream recorded on the DVD, column 16, lines 22-60), comprising:

- A data area storing a plurality of data packets including source packets of at least video data of a stream including a plurality of clip files recorded on the recording medium (e.g. figure 6A, a video stream contains plurality of GOP, wherein each GOP contains plurality of video packets, column 16, lines 44-60);
- a plurality of time control information areas (e.g. Figure 6H, plurality of GOP contain plurality of video packets, where a PTS and a DTS can be assigned once to each GOP, column 23, lines 26-49), representing decoding time interval information (e.g. interval corresponds to the GOP), each of said plurality of time control information areas recorded at a fixed time interval in a corresponding one of said plurality of data

packets of the stream (e.g. figure 6H, PTS and DTS in one packet header).

- a management area storing management information for managing reproduction of the stream, the management information including an information file associated with each clip file providing a map for the associated clip file, each map mapping presentation time information to address information for the associated clip file (e.g. column 80, lines 51-67 and figure 12A, time map table).

Claims 3, 8,10, 11, 12, 13 and 14 are rejected for the same reasons as discussed in claim 1 above.

For claim 2, Okada et al teach fixed time interval is not greater than 700 milliseconds (column 24, lines 20-56, continuity of DTS and SCRs exhibit the same characteristic, wherein the time stamp gap must not exceed 0.7 seconds).

For claim 6, Okada et al teach each of time control information areas is recorded in a first data packet within said fixed recording area of the recording medium (e.g. figure 6C shows the first video packet in the GOP and figure 6H shows the DTS is in the Packet Header, wherein only the first video packet has a Packet header, and column 23 lines 42-45 teach that the DTS can be in all packet).

For claim 7, Okada et al teach the time control information areas is recorded in an arbitrary one data packet within said fixed recording area of the recording medium (column 23 lines 42-45 teach that the DTS can be in all packet).

For claim 4, Okada et al teach fixed recording area is a sector (e.g. figure 3A and 3 B, column 12, line 42-column 13, line 10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,181,870 B1) as applied to claims 1, 2, 3, 4, 6, 7, 8, 10, 11 and 12 above, and further in view of Yoo et al (US 2002/0,150,392 A1).

See the teaching of Okada et al above.

For claim 9, Okada et al fail to specify fixed packet interval is 10 packets. Yoo et al teach a fixed packet interval is 10 packets (paragraph [0033]). It would have been obvious for one ordinary skill in the art at the time the invention was made to have used 10 packets as a fixed interval in the system disclosed by Okada et al to simplify the data process step and reduce the time for data processing.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,181,870 B1) as applied to claims 1, 2, 3, 4, 6, 7, 8, 10, 11 and 12 above.

See the teaching of Okada et al above.

For claim 5, Okada et al fail to specify the sector has a recording area of 2048 bytes. The examiner takes official notice of a recording area of 2048 bytes since it is well known in the DVD technology. It would have been obvious for one ordinary skill in the art at the time the invention was made to use 2048 bytes for the sector to ensure that the optical pickup can move a constant velocity while performing access within a single zone. By doing so, the recording density of the DVD is raised, and rotation control during recording and reproduction is made easier.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Owashi et al (US 6,757,478 B2); Yamagishi et al (US 6,141,491).

All grounds of rejection are maintained. Accordingly, THIS ACTION IS MADE FINAL. See MPEG § 706.07 (a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136 (a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period. Then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000

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